

Colorado Table Value Standards, 5 CCR 1002 Regulation 31

Bakers Bridge

Hardness =

110 milligrams per liter

Parameter	Measured Value	Aquatic Life				Domestic Water Supply	
		Acute	Acute (tr)	Chronic	Chronic (tr)	Agriculture	Supply
pH			6.5 to 9			NS	
Aluminum	771	3898	NS	556	NS	NS	NS
Antimony	1 U	NS	NS	NS	NS	NS	6
Arsenic	2 U	340	NS	150	NS	NS	0.2 - 10
Barium	32.1	NS	NS	NS	NS	NS	1000
Beryllium	5 U	NS	NS	NS	NS	100	4
Cadmium	0.535	3.0	1.85	0.46	NS	10	5
Chromium III	2.09 combined	616	NS	80	NS	100	50
Chromium VI	2.09 combined	16	NS	11	NS	100	50
Copper	3.16	14.7	NS	9.7	NS	200	1000
Iron	1710	NS	NS	1000	NS	NS	300
Lead	0.2 U	72	NS	2.8	NS	100	50
Manganese	401	3082	NS	1703	NS	200	50
Mercury	0.1 U	NS	NS	0.01	NS	NS	2
Molybdenum	1 U	NS	NS	NS	NS	300	210
Nickel	0.551	508	NS	56	NS	200	100
Selenium	2 U	18.4	NS	4.6	NS	20	50
Silver	0.736	2.39	NS	0.38	0.09	NS	100
Thallium	1 U	NS	NS	NS	NS	NS	0.5
Uranium	NA	2668	NS	1667	NS	NS	16.8 - 30
Zinc	85.6	174	NS	132	145	2000	5000

Notes: Aquatic life standards are for dissolved metals except aluminum (total recoverable), iron (total recoverable), and mercury. Agriculture and domestic use standards are total recoverable except iron (dissolved).

The following link goes to the Colorado Water Quality Control Division Regulations

<https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations>

The standards shown above are table value standards (TVS) cited in Regulation 31 that are the standards for many but not all streams. You must look up the standards that apply to the stream segment in question. These are found in the tables associated with the various stream classifications. The standards are based on stream classifications and, in some cases, existing water quality (and a whole lot of other things).

Insert the hardness of your water/sample (milligrams per liter) in the yellow highlighted cell. The spreadsheet will calculate the hardnesses. Hardnesses are in mg/L as calcium carbonate and shall be no greater than 400 mg/L (220 mg/L for aluminum).

Hardness values are for the sample in question. A regression formula is used to calculate the hardness value used to calculate percent dissolved oxygen. There are MANY notes associated with the standards. Refer to Regulation 31 Table 3 Footnotes (page 58) and notes in each regulation. These are just the metals WQS. Organic, radiation, physical, and other inorganic parameters are also regulated.

The agriculture, domestic water supply (WS) standards are typically based on 30 day averages, but some are 1 day averages. Look

Water + Fish	Fish Ingestion	Fraction
NS	NS	Total Recoverable
5.6	640	Dissolved
0.02	7.6	Dissolved
NS	NS	Dissolved
NS	NS	Dissolved
NS	NS	Dissolved
NS	NS	Dissolved
100	NS	Dissolved
1300	NS	Dissolved
NS	NS	Total Recoverable
NS	NS	Dissolved
NS	NS	Dissolved
NS	NS	Total
NS	NS	Dissolved
610	4600	Dissolved
170	4200	Dissolved
NS	NS	Dissolved
0.24	0.47	Dissolved
NS	NS	Dissolved
7400	26000	Dissolved

X

y (total final residue value)

eam segments.

arious basins (Regulations 32 to 38)

hardness-based standards based on this number.

rmit effluent limits (see Regulation 31).

ulation.

ok in the regulation for these.



Colorado Table Value Standards, 5 CCR 1002 Regulation 31

32nd Street Bridge Sample collected 8/10/2015 at 11:47

Hardness =

160 milligrams per liter

Parameter	Measured Value	Aquatic Life				Domestic Water	
		Acute	Acute (tr)	Chronic	Chronic (tr)	Agriculture	Supply
pH			6.5 to 9			NS	
Aluminum	362	6511	NS	930	NS	NS	NS
Antimony	1 U	NS	NS	NS	NS	NS	6
Arsenic	2 U	340	NS	150	NS	NS	0.2 - 10
Barium	43	NS	NS	NS	NS	NS	1000
Beryllium	5 U	NS	NS	NS	NS	100	4
Cadmium	0.195	4.1	2.57	0.60	NS	10	5
Chromium III	4.5 combined	837	NS	109	NS	100	50
Chromium VI	4.5 combined	16	NS	11	NS	100	50
Copper	2.23	20.9	NS	13.4	NS	200	1000
Iron	884	NS	NS	1000	NS	NS	300
Lead	0.2 U	107	NS	4.2	NS	100	50
Manganese	136	3492	NS	1929	NS	200	50
Mercury	0.1 U	NS	NS	0.01	NS	NS	2
Molybdenum	1 U	NS	NS	NS	NS	300	210
Nickel	1 U	697	NS	77	NS	200	100
Selenium	2 U	18.4	NS	4.6	NS	20	50
Silver	1 U	4.55	NS	0.72	0.17	NS	100
Thallium	1 U	NS	NS	NS	NS	NS	0.5
Uranium	NA	4033	NS	2519	NS	NS	16.8 - 30
Zinc	54.5	245	NS	186	323	2000	5000

Notes: Aquatic life standards are for dissolved metals except aluminum (total recoverable), iron (total recoverable), and mercury (total recoverable). Agriculture and domestic use standards are total recoverable except iron (dissolved).

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Hardness values are for the sample in question. A regression formula is used to calculate the hardness value used to calculate the percent hardness. There are MANY notes associated with the standards. Refer to Regulation 31 Table 3 Footnotes (page 58) and notes in each regulation. These are just the metals WQS. Organic, radiation, physical, and other inorganic parameters are also regulated.

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1300	NS	Dissolved
NS	NS	Total Recoverable
NS	NS	Dissolved
NS	NS	Dissolved
NS	NS	Total
NS	NS	Dissolved
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